

Before the  
Federal Communications Commission  
Washington, DC 20554

In the Matter of	)	WT Docket No. 05-235
	)	
	)	
Amendment of Part 97 of the Communication's Rules	)	
To Implement WRC-03 Regulations Applicable to	)	
Requirements for Operator Licenses in the	)	
Amateur Radio Service	)	

To: The Commission

## **COMMENTS OF MICHAEL J. DINELLI, N9BOR**

### **BACKGROUND**

This is my 25<sup>th</sup> year as a licensed Amateur Radio operator. In 1980, I entered the Amateur Radio Service with a Technician Class license. Six months later, I upgraded to General Class and remained a General Class operator for most of my tenure. When proposals were filed to reduce or eliminate telegraphy examination requirements, I decided to upgrade to Advanced and then Extra Class. I did not want to lose the opportunity to work for and earn these licenses. In 1999, I upgraded to Advanced Class and Extra Class, which included a 20-wpm telegraphy examination.

I am an active Amateur Radio operator who has used the SSB, CW, AM, FM and digital modes. I have built electronic kits, homebrewed gear and maintained my own equipment. I have served in various elected positions for a local Amateur Radio club. I am trustee for the Robert F. Heytow Memorial Radio Club, which publishes the free ham radio e-Zine, the *K9YA Telegraph*. The *K9YA Telegraph* has readers in 90 countries.

### **COMMENTS**

I do **not** agree with the Commission's proposal to eliminate the requirement that individuals pass a telegraphy examination for General and Extra class licensees.

There is no telegraphy examination requirement for the Technician Class license. This license affords tremendous privileges and welcomes individuals interested in communications technology.

A telegraphy examination is no longer required as a result of changes at WRC-03. However, this change in International requirements does not and should not affect the Basis and Purpose of the Amateur Radio Service as outlined in §91.1 (a-e).

The Commission failed to include the most important language of §91.1a in NPRM 05-143—the line that reads “...particularly with respect to providing emergency communications.” The world continues to be reminded of, and relies upon, Amateur Radio’s role in recent natural disasters.

Telegraphy plays a vital role in saving lives and passing health and welfare traffic. While most traffic is conveyed using voice modes, telegraphy is available to those who possess the skill—to fill in when needed most—under extremely poor radio conditions.

CW telegraphy offers an 18 db advantage over SSB telephony. This is real and significant when a message *has* to be conveyed. It is very easy to switch from SSB to CW when conditions warrant.

Switching from SSB telephony to CW telegraphy requires no additional equipment. Telegraphy does not require a computer, software, interface or extra cabling. At the worst possible time, a skilled telegrapher will never need to “reboot.” This is where simple is definitely better. The vast majority of commercially manufactured high frequency Amateur Radio transceivers are equipped for telegraphy operation.

Every single line defining the Amateur Radio Service in §91.1 demonstrates the need to retain telegraphy examination requirements for operation below 30 MHz.

*Part 97 Amateur Radio Service*  
*Subpart A—General Provisions*  
*§97.1 Basis and purpose.*

*(a) Recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications.*

As previously stated, when the message absolutely has to go through, telegraphy is available for those possessing the skill. An examination requirement assures the skill will be there when needed.

*(b) Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art.*

Thousands of Amateur Radio operators build and operate their own low power CW radios. Radio Amateurs can purchase a basic CW-only transceiver kit for \$25.00. I have contacted many Amateurs using simple transceivers having less than one watt of power output. As an amateur’s technical skills progress, they may purchase more advanced kits or build radios from parts. Most of these projects are for CW only. When completed, many operate with

extremely low power consumption enabling the operator to communicate for many hours with battery power ideal under—emergency—off-the-grid conditions.

*(c) Encouragement and improvement of the amateur service through rules which provide for advancing skills in both the communications and technical phases of the art.*

A knowledge of telegraphy fulfills this requirement for advancing skills and provides an incentive to gain more privileges by learning more skills.

*(d) Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts.*

A trained operator should possess the skills necessary to take advantage of the 18 db differential between SSB telephony and CW telegraphy.

*(e) Continuation and extension of the amateur's unique ability to enhance international goodwill.*

Radio Amateurs skilled in the art of telegraphy can easily communicate with foreign operators, even though they don't share a common language. Using Q-signals, amateurs can convey many standard phrases. For example: QTH means, "my location is..."

CW Telegraphy is pure communication. Telegraphy transcends accents, the inability to speak or gender biases. Only the words are taken into consideration when communicating via telegraphy. The ability to communicate with one's fingers is an international commonality.

The Commission states that eliminating a telegraphy examination will, "promote more efficient use of the radio spectrum currently allocated to the Amateur Radio Service." This argument is specious as a CW telegraphy signal occupies approximately 1/20 of an SSB telephony signal (100 Hz CW vs. 2,000 Hz SSB telephony).

The goals of the Amateur Radio Service should emphasize "trained operators" as outlined in §91.1. The Amateur Radio Service (a skill-based license) should not be converted to a non-skill-based Personal Radio Service. The Commission has already provided adequately for non-skilled radio communications with Citizen's Band, FRS, MURS and GMRS.

CW telegraphy is a mature, basic communication mode, and an effective one, needing only simple, low-cost equipment.

Unpaid volunteers administer both telegraphy and written exams for the Amateur Radio Service. These volunteers expect nothing in return and do so to give something back to the Amateur Radio Service. The argument by NCVEC that a telegraphy examination requires "extensive preparation and special equipment to administer" is absurd. If this statement is made truthfully, it only demonstrates that radio Amateurs no longer have the technical expertise to operate a simple tape recorder. The development of revised question pools for

written examinations is considerably more burdensome than administering a simple telegraphy examination.

I have participated in many VE testing sessions. I have never heard a complaint that administering a telegraphy exam, or any Amateur exam, was an undue burden. The largest of all the VECs was not a signer of the NCVEC Petition. The American Radio Relay League (the largest association representing radio Amateurs in the United States) argues that “a demonstration of capability in Morse telegraphy is an element of communications operating skill that should be included in the portfolio of operating skills demonstrated by the most accomplished radio amateurs.”

I have communicated with many handicapped individuals and they were not only able to pass a telegraphy examination, they were truly proficient telegraphers. I have communicated with Amateurs who were afflicted with paralysis, blindness and impaired hearing via CW telegraphy. Several of these Amateurs, unable to use their arms, used a puff-tube (blew into a straw) to form Morse code characters.

The determination of whether to retain telegraphy examinations as a license requirement should not be based on winning a popularity contest. It is normal for both electricity and humans to follow the path of least resistance—without the telegraphy examination requirement I would not today be a proficient telegrapher.

The ability to communicate using Morse telegraphy is not just another mode. It is a skill requiring practice to learn the characters and their sounds. If removed as a licensing requirement the incentive to acquire this essential radio communications skill is greatly diminished.

## **SUMMARY**

The ability to communicate via Morse code telegraphy is a valuable skill. The Amateur Radio Service is a skill-based service. This skill is vital to fulfilling the Basis and Purpose of the Amateur Radio Service (§91.1). While eliminating a telegraphy examination requirement does not outlaw CW telegraphy, it will severely impact the reservoir of trained operators. These are the trained operators the United States needs when called upon to serve during emergencies and as a source of knowledgeable recruits for the U.S. military's Special Forces units.